#### **AMENDMENTS TO THE SPECIFICATION**

Please replace the Title with the following title: "Mining Processing

Service Requests for Product Support with Indexed and Clustered Answer

Objects".

#### Please replace paragraph [0005] with the following paragraph:

[0005] Systems and methods for mining processing service requests for product support with indexed and clustered answer objects are described. In one aspect, unstructured service requests are converted to one or more structured answer objects. Each structured answer object includes hierarchically structured historic problem diagnosis data. In view of a product problem description, a set of the one or more structured answer objects is identified. Each structured answer object in the set includes keyword(s) and/or keyphrase(s) related to the product problem description. Historic and hierarchically structured problem diagnosis data from the set is provided to an end-user for product problem diagnosis.

### Please replace paragraph [0007] with the following paragraph:

[0007] Fig. 1 illustrates an exemplary system for mining processing service requests for product support with indexed and clustered answer objects.

# Please replace paragraph [0011] with the following paragraph:

[0011] Fig. 5 shows an exemplary suitable computing environment on which the subsequently described systems, apparatuses and methods for mining

<u>processing</u> service requests for product support <u>with indexed and clustered answer</u> <u>objects</u> may be fully or partially implemented.

## Please replace paragraph [0024] with the following paragraph:

[0024] Fig. 1 shows an exemplary system 100 for mining processing service requests for product support with indexed and clustered answer objects. In this implementation, system 100 includes product support service (PSS) server 102 coupled across a communications network 104 to client computing device 106. Network 104 may include any combination of a local area network (LAN) and a general wide area network (WAN) communication environments, such as those which are commonplace in offices, enterprise-wide computer networks, intranets, and the Internet. PSS server 102 is coupled to the following data repositories: PSS service request (SR) log 108, clustered and hierarchically structured answer data objects 110, and KB article(s) 112. Client computing device 106 is any type of computing device such as a personal computer, a laptop, a server, a mobile computing device (e.g., a cellular phone, personal digital assistant, or handheld computer), etc.

### Please replace paragraph [0043] with the following paragraph:

[0043] Fig. 5 illustrates an example of a suitable computing environment 500 on which the system 100 of Fig. 1 and the methodology of Figs. 3 and 4 for mining processing service requests for product support with indexed and clustered answer objects may be fully or partially implemented. Exemplary computing environment 500 is only one example of a suitable computing environment and is not intended to suggest any limitation as to the scope of use or

functionality of systems and methods the described herein. Neither should computing environment 500 be interpreted as having any dependency or requirement relating to any one or combination of components illustrated in computing environment 500.

#### Please replace paragraph [0045] with the following paragraph:

[0045] With reference to Fig. 5, an exemplary system for mining processing service requests for product support with indexed and clustered answer objects includes a general purpose computing device in the form of a computer 510. The following described aspects of computer 510 are exemplary implementations of client computing device PSS server 102 (Fig. 1) and/or client computing device 106. Components of computer 510 may include, but are not limited to, processing unit(s) 520, a system memory 530, and a system bus 521 that couples various system components including the system memory to the processing unit 520. The system bus 521 may be any of several types of bus structures including a memory bus or memory controller, a peripheral bus, and a local bus using any of a variety of bus architectures. By way of example and not limitation, such architectures may include Industry Standard Architecture (ISA) bus, Micro Channel Architecture (MCA) bus, Enhanced ISA (EISA) bus, Video Electronics Standards Association (VESA) local bus, and Peripheral Component Interconnect (PCI) bus also known as Mezzanine bus

#### Please replace paragraph [0048] with the following paragraph:

[0048] System memory 530 includes computer storage media in the form of volatile and/or nonvolatile memory such as read only memory (ROM) 531 and random access memory (RAM) 532. A basic input/output system 533 (BIOS), containing the basic routines that help to transfer information between elements within computer 510, such as during start-up, is typically stored in ROM 531. RAM 532 typically contains data and/or program modules that are immediately accessible to and/or presently being operated on by processing unit 520. By way of example, and not limitation, Fig. 5 illustrates operating system 534, application programs 535, other program modules 536, and program data 537. In one implementation, wherein computer 510 is a PSS server 102. In this scenario, application programs 535 comprise structured solution answer object generation module 124, reinforced clustering module 132, indexing module 128, search provider module 140, and knowledge base (KB) update module 136. In this same scenario, program data 537 comprises metadata 126, index 130, other data 134, and response message 118. In another implementation, wherein computer 510 is a client computing device 106 of Fig. 1, application programs 535 comprise troubleshooting wizard 120. In this same scenario, program data 537 comprises query 116, and product problem symptoms/description 138.

### Please replace paragraph [0055] with the following paragraph:

[0055] Although the systems and methods for mining processing service requests for product support with indexed and clustered answer objects have been described in language specific to structural features and/or methodological operations or actions, it is understood that the implementations defined in the